# Protocol for Incidental Take Authorization

# Poweshiek Skipperling, (Oarisma poweshiek) (Parker)

#### Note

If carrying out a given protocol is not feasible, or multiple listed species in a given management area pose conflicts, contact the Bureau of Endangered Resources at 608/264-6057. Staff in BER will work with Integrated Science Services (Research) staff, species experts and managers to establish an acceptable protocol for a given site that will allow for incidental take without further legal Consultation or public notice

#### I. Species Background Information

#### A. Status

State status: Endangered.

**USFWS Region 3 Species of Management Concern?** No.

**Number of Known Sites in Wisconsin:** 3, all on State Natural Areas (SNAs) in Waukesha and Green Lake counties. Reported as common on prairies near Milwaukee and Racine by local naturalists in the early 1900s.

**Global Range:** Michigan, Indiana, Illinois, Iowa, Wisconsin, Minnesota, North Dakota, South Dakota and Manitoba, Canada.

#### B. Habitat

**Larval Host plants:** Primarily prairie dropseed (*Sporobolis heterolepis*) and little bluestem (*Schizachyrium scoparium*); eggs are sometimes deposited on adjacent vegetation.

**General Habitat Description:** Prairie including remnants and pastures with large patches of the native grass host plants and nectar plants. Assumed preference for wet-mesic habitat may actually be a reflection of the sites that have functioned as refugia and enabled the

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species to persist. Populations occasionally have been reported from high, dry prairie sites as well as wet-mesic prairies.

**Critical habitat features:** Abundance of larval food plants and suitable nectar plants. Commonly used nectar plants include black-eyed susan (*Rudbeckia hirta*) and other composites, downy wood-mint (*Blephilia ciliata*), brook lobelia (*Lobelia kalmii*), and wing-angled loosestrife (*Lythrum alatum*).

Over-wintering habitat: same as above

### C. <u>Life History</u>

Number of generations per year: One.

Over-wintering stage: Partially grown larva (11-12 mm in length).

**Over-wintering location:** On host-plant leaf blades, often above or at the junction with the stem—usually 2-6 inches above the base of the entire plant. No shelter is constructed.

Adult Flight Period/Adults Active: Typically late June into mid-July.

**Single-Season Dispersal Ability**: Unrecorded. Flights tend to be low and rapid, within a foot over the top of the vegetation. Males patrol larval host patches seeking females. Observed dispersal into adjacent suitable habitat may be a factor of population density. Trees and tall shrubs are effective barriers to dispersal.

**Immature Seasonal Activity:** Larvae generally remain on the same host plant from the time they emerge from their egg case until they pupate in late May or early June of the following year. Diapause occurs in late fall and feeding resumes in early spring. Pupae are formed upright on host plants or adjacent vegetation usually within 6-12" above ground.

# II. Management Protocol For Authorized Incidental Take

If the management activity is for the purpose of recovering, maintaining or improving the grassland, prairie or savanna ecosystem that includes habitat for poweshiek skipperlings then incidental take is allowed if these conditions are followed:

1. If screening indicates that poweshiek skipperlings may be present on the management area (e.g., observed in the Section or surrounding Sections within the last 15 years; there is suitable habitat, and larval host plants and adult nectar plants are available), then pre-treatment presence/absence surveys must be conducted over a minimum of 2 flight seasons (see above). Such surveys must be done by personnel with the expertise to identify poweshiek skipperling adults. (Contact BER or Susan Borkin of Milwaukee Public Museum re: the best survey dates for the current year's flight

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season.)

- 2. If multiple surveys during the flight season indicate that powerhiek skipperlings are not present within the management area, then there are no restrictions on the activity.
- 3. Given the rarity of this species, if poweshiek skipperlings are found to be present within the management area, then *Department staff should contact the Bureau of Endangered Resources* (BER) at 608/264-6057. Currently there are only three known sites for poweshiek skipperlings, all on State Natural Areas, in Waukesha and Green Lake Counties.

Staff in BER will work with managers and species experts to determine the best course of action for a given site. The population level and portions of the management area that are critical to avoid jeopardizing the recovery of the species must be determined, and depending on the circumstances at the given site, incidental take may be allowed under the following conditions:

- **A. Burning:** Given the rarity of this species, consult with BER before conducting prescribed burning in poweshiek habitat.
- **B. Mowing/Haying:** May be employed under consultation with the DNR Bureaus of Endangered Resources and Integrated Science Services.
- **C. Selective Brush/Tree-cutting:** Selective hand cutting/brushing may be used to maintain or restore a site. Cuttings must not be piled on top of occupied poweshiek host plant areas.
- **D. Grazing:** May be employed under consultation with the DNR Bureaus of Endangered Resources and Integrated Science Services.
- **E. Herbicide Use:** Herbicides may be used for spot treatment of woody growth. If broadcast spraying of herbicide is required, consult with the DNR Bureaus of Endangered Resources and Integrated Science Services.

# **Survey Protocol**

For Presence /Absence Surveys or to determine extent of the population site:

Surveys must be conducted by personnel with the expertise to identify poweshiek adults and host plants. Survey at least 20 minutes per acre of habitat and over a minimum of two flight seasons.

**Adults:** Presence of poweshiek adults can be assessed by conducting 2-3 surveys during the peak flight period. Surveys must be conducted under appropriate flight conditions (contact BER or Susan Borkin of Milwaukee Public Museum.)

If poweshiek skippers are found, observations of males patrolling over patches of host plants may be helpful for determining the portions of the management area most heavily utilized by the population.

**Immatures:** It is extremely difficult to locate poweshiek immatures. Egg-laying can sometimes be observed, and such observations may be helpful in determining the portions of the management area most heavily utilized by the population.

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# **Definitions**

**Definition of "Site" for poweshiek skipperling:** Prairie habitat with large patches of prairie dropseed and little bluestem plus nectar plants that could be utilized by a poweshiek popoulation for reproduction and feeding. "Site" will refer to such habitat within a given property ownership, or across ownerships where management agreements for the species are in place.